CLASS SPECIFICATION

TITLE	GRADE	EEO-4	CODE
COMPUTER NETWORK SPECIALIST III	40	B	7.916
COMPUTER NETWORK SPECIALIST II	38	B	7.918
COMPUTER NETWORK SPECIALIST I	36	B	7.919

SERIES CONCEPT

Incumbents in this class series plan, implement, and administer an integrated geographically dispersed information processing network comprised of multiple hardware platforms, information resources, communications protocols and physical network topologies. Incumbents are also responsible for network operating systems, personal computers, and work stations.

Incumbents design, install and configure PC-related hardware and software including, but not limited to, network operating systems, file servers, print servers, departmental communication gateways, network operating boards, applications software, and stand-alone operating systems.

Provide technical support to staff and users, and assist users with application and systems problems; diagnose and resolve problems with network file servers, gateways, telecommunications, bridges, personal computers, mini computers, hard disks, printers, etc., and install new hardware as needed; perform or instruct users how to perform data backups on agency systems.

Incumbents provide ongoing training to users in the use of the microcomputers and existing software/hardware. This is accomplished by demonstrating use of the microcomputer, introducing the various application software packages, instructing users on the capabilities of the equipment, and assisting in structuring training courses.

Projects system growth rates and capacity requirements to evaluate and recommend software, hardware and data processing options to management.

Reviews and analyzes system utilization statistics, training needs, hardware, software and environmental needs to plan network expansion and produce optimization plans.

Manages and integrates operating system including server software modules, security levels, image technologies, work station generation interface, utilities and third party products to ensure the integrity of the network system.

Plans, develops, executes and manages network reporting procedures and policies governing network operations.

Supervises and provides technical direction for the configuration of networks.

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SERIES CONCEPT (cont.)

Monitors network budget and evaluates impact of purchasing new and maintaining existing hardware and software to meet agency future needs.

Reviews, designs and manages physical network topographies to meet both agency and client needs.

Researches/analyzes natural and accidental risk factors to develop and execute a disaster prevention and recovery plan.

Researches and assists in the design of client server, multi-user applications using mainframe, local and wide area networks, work station hardware and software.

Analyzes data processing techniques, technical developments, capacity and configuration needs for information systems plan.

Incumbents resolve complex software and network problems on micro, mini or mainframe computers; prepare documentation such as instructional or procedural manuals; modify hardware or software to meet agency needs; design and implement network configuration; provide consultation to information systems personnel and serve as technical resource for agency information systems planning.

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CLASS CONCEPTS

COMPUTER NETWORK SPECIALIST III

Under general administrative direction performs the full range of duties described in the series concept. Positions allocated to this class are responsible for planning, directing, implementing and monitoring an integrated geographically dispersed information processing network comprised of multiple hardware platforms, information resources, communications protocols and physical network topologies.

Network Specialist III's are distinguished from the Network Specialist II by their level of responsibility for serving several state agencies and statewide networking systems.

Positions allocated to this class develop networking plans and strategies for statewide networking including statewide standards, network plan and design methodology, capacity planning strategies and growth estimates; monitor current network strategies and assist in analyzing cost justification decisions.

CLASS CONCEPTS (cont.)

Positions allocated to this class are responsible for wide area networks with multiple PC's, mid-ranges, and mainframe handling projects in a wide area network using multiple languages.

Incumbents at this level would be expected to have strategic planning responsibilities, and to be involved in inter-agency networking system coordination.

Exercises supervision over Information Systems technical and support staff.

COMPUTER NETWORK SPECIALIST II

Positions allocated to this class work under general direction and perform all or most the duties described in the series concept.

Incumbents are responsible for implementing and managing multiple protocol, multiple location local/wide area network. ,

Positions allocated to this class are distinguished from the Network Specialist by the complexity and the scope of the network system that they administer.

COMPUTER NETWORK SPECIALIST I

Positions allocated to this class work under direction, perform most of the duties described in the series concept, and are responsible for mid-range computers in a stand-alone environment with networked workstations using one or multiple languages.

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MINIMUM QUALIFICATIONS

COMPUTER NETWORK SPECIALIST III

EDUCATION AND EXPERIENCE:

Bachelor's degree from an accredited college or university with a major work in computer science, management information systems, systems analysis and design or closely related field and five years of experience in computer networking system comprised of multiple hardware platforms including two years of supervisory responsibility or computer networking project management responsibility; OR

II

Two years of experience as Network Specialist II in Nevada State service; OR

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MINIMUM QUALIFICATIONS (cont.)

EDUCATION AND EXPERIENCE: (cont.)

III

Any combination of education and experience where the applicant has demonstrated possession of the entry level knowledge, skills, and abilities.

EQUIVALENCY STATEMENT:

Education above the high school level may be substituted for experience on the basis of 30 semester credits equals six months of the required experience.

SPECIAL NOTE:

In order to meet the needs of each agency, the position may require specialized backgrounds or skills in order for the incumbent to perform all of the tasks required of the position. Any specialized background required will be identified prior to the recruitment process within the parameters of the class specification.

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES: (These may be acquired on the job and/or needed to perform the work assigned.)

I

Detailed knowledge of departmental rules, regulations, policies and procedures pertaining to computer networking system.

ENTRY KNOWLEDGE, SKILLS AND ABILITIES: (Applicants will be possession of these through written, oral, performance or any other procedures.)

I

Detailed knowledge of network protocols. Detailed knowledge of the interdependence of software operating in a multi-functioning, multi-user data processing environment. Detailed knowledge of the principles, practices, and techniques used in the installation, maintenance and support of operating systems, software and peripherals found in a LAN/WAN environment. Detailed knowledge of systems analysis and design techniques. Detailed knowledge of the concepts, characteristics, and capabilities of computer operation platforms. Detailed knowledge of data processing systems requisite for gathering and estimating prices, performance of existing and proposed networking systems. Detailed knowledge of current and developing computer networking technology. Detailed knowledge of multi-platform and multi-user computer networking system. Detailed knowledge of operating system command languages. Detailed knowledge of disaster recovery, data recovery and backup concepts and techniques. Working knowledge of computer hardware. Working knowledge of systems integration hardware and data communications techniques as applied to network operations. Working knowledge of teleprocessing techniques.

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MINIMUM QUALIFICATIONS (cont.)

ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES: (cont.)

Skill in problem solving. Skill in interpreting technical manuals.

Ability to perform cost/benefit analysis. Ability to develop and support main frame, mid-range, wide area/local area and work station hardware and software. Ability to develop multi-user client server applications development environment using mainframe, WAN, LAN and work station hardware. Ability to present network design concepts to management and user representatives. Ability to plan for the implementation of design changes or additions and the acquisition of hardware and software using knowledge of department needs and the impact of network changes on the users. Ability to implement network changes or additions using knowledge of equipment associated with networks, operating systems, and software. Ability to provide technical direction and leadership. Ability to train technical personnel. Ability to organize and manage projects.

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COMPUTER NETWORK SPECIALIST II

EDUCATION AND EXPERIENCE

Bachelor's degree from an accredited college or university with a major work in computer science, management information systems, systems analysis and design or closely related field and three years of experience in computer networking system comprised of multiple hardware platforms; OR

II
Two years of experience as Network Specialist I in Nevada State Service; OR

III
Any combination of education and experience where the applicant has demonstrated possession of the entry level knowledge, skills, and abilities.

EQUIVALENCY STATEMENT:

Education above the high school level may be substituted for experience on the basis of 30 semester credits equals six months of the required experience.

SPECIAL NOTE:

In order to meet the needs of various agencies, individual positions in this class may require specialized backgrounds or skills in order for the incumbent to perform all of the essential duties. Any specialized background required will be identified prior to recruitment, within the parameters of the class specification.

MINIMUM QUALIFICATIONS (cont.)

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES: (These may be acquired on the job and/or needed to perform the work assigned.)

Detailed knowledge of departmental rules, regulations, policies and procedures pertaining to computer networking system.

ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES: (Applicants will be screened for possession of these through written, oral, performance or any other evaluation procedures.)

Detailed knowledge of the principles, practices and techniques used in the installation, maintenance and support of operating systems, software and peripherals found in a LAN/WAN environment. Detailed knowledge of computer network protocols. Detailed knowledge of the concepts, characteristics, and capabilities of computer operation platforms. Detailed knowledge of current and developing computer networking technology. Working knowledge of multi-user computer networking system. Detailed knowledge of operating system command languages. Detailed knowledge of disaster recovery, data recovery and backup concepts and techniques. Working knowledge of computer hardware. Working knowledge of systems integration, hardware, and data communications.

Skill in computer network problem solving. Skill in interpreting technical manuals.

Ability to perform cost/benefit analysis. Ability to develop and support mid-range, wide area/local area and work station hardware and software. Ability to develop multi-user client server applications using WAN, LAN and workstation hardware. Ability to present network design concepts to management and users. Ability to implement network changes or additions using knowledge of equipment associated with networks, operating systems, and software. Ability to train users.

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COMPUTER NETWORK SPECIALIST I

EDUCATION AND/OR EXPERIENCE:

Bachelor's degree from an accredited college or university with major work in computer science, management information systems, systems analysis and design or a closely related field and two years of experience in computer networking systems; OR

II

Two years of experience as Computer Network Technician II in Nevada State service; OR

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MINIMUM QUALIFICATIONS (cont.

EDUCATION AND EXPERIENCE: (cont.)

III

Any combination of education and experience by which the applicant demonstrates possession of the entry level knowledge, skills, and abilities.

EQUIVALENCY STATEMENT:

Education above the high school level may be substituted for experience on the basis of 30 semester credits equals six months of the required experience.

SPECIAL NOTE:

In order to meet the needs of various agencies, individual positions in this class may require specialized backgrounds or skills in order for the incumbent to perform all of the essential duties. Any specialized background required will be identified prior to recruitment, within the parameters of the class specification.

FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES: (These may be acquired on the job and/or needed to perform the work assigned.)

I

Detailed knowledge of departmental rules, regulations, policies and procedures pertaining to computer networking systems. Detailed knowledge of various microcomputer languages, operating systems and hardware. Detailed knowledge of local area network operating systems. Working knowledge of at least one network operating system's commands, administration and utilities including recovery and back-up.

ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES: (Applicants will be screened for possession of these through written, oral performance or other evaluation procedures.)

Working knowledge of the principles and practices, and techniques used in the installation, maintenance and support of operating systems, software and peripherals found in LAN/WAN environment. General knowledge of the concepts, characteristics, and capabilities of computer operation platforms. General knowledge of current and developing computer networking technology. Working knowledge of disaster recovery, data recovery and backup concepts and techniques.

Skill in interpreting technical manuals.

MINIMUM QUALIFICATIONS (cont.)

ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES: (cont.

Ability to develop wide area/local area and workstation hardware and software. Ability to develop multi-user client server applications using WAN/LAN and workstation hardware. Ability to implement network changes or additions using knowledge of equipment associated with networks, operating systems, and software.

This class specification is used for classification, recruitment and examination purposes. It is not to be considered a substitute for work performance standards for positions assigned to this class.

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ESTABLISHED:	7/1/95P	7/1/95P	7/1/95P
	9/16/94PC	9/16/94PC	9/16/94PC
REVISED:	7/1/97LG	7/1/97LG	7/1/97LG